DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: May 1, 2018	**WEATHER:** Overcast, temperatures in the ~50s, patches of sun

Personnel and Visitors Onsite:
Research vessel Tieton - CDM Smith: Wardah Azhar; AECOM: Anthony Palmieri; Geosyntec: Erin Dunbar; Gravity Marine: Rene Trudeau, Chad Furulie.

Research vessel Cayuse – CDM Smith: Kyle Vickstrom; AECOM: Michaela McCoog; Geosyntec: Luke Smith; Gravity Marine: Peter Jenkins, Jeff Schut

Planned Activity:

- Collect surface sediment samples at random stratified sample locations near river mile (RM) 11 SMA sediment samples in Swan Island Lagoon

Activity Completed:
A tailgate safety meeting was led by AECOM. Topics included looking out for errors due to complacency, and hydration. Other topics included readiness for unexpected boating hazards (waves, debris, etc), boat traffic.

Wardah Azhar performed oversight of surface sediment sampling at stratified random sediment locations from 08:00 to 17:35 on board the Tieton. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- 3-point composite surface sediment samples were collected at seven locations between RM 11 and RM 11.5 West.
- An SMA Targeted sample was attempted but location was abandoned due to minor sheen observed in first sample collected.
- Other activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.
- Position checks at PH-2 indicated that the vessel GPS was reading within 1.4 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.

Kyle Vickstrom performed oversight of surface sediment sampling at random stratified locations from 08:00 to 17:50 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- Position checks at PH-2 indicated that the vessel GPS was reading within 1.2 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.
- 3-point composite surface sediment samples were collected from 9 SMA sampling locations within Swan Island Lagoon as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.

Status of Schedule & Priority Work:

- The SMA targeted sampling will continue through the week. AECOM/Geosyntec are focusing on locations where good recovery is easily achieved. Agreement on sampling procedures is needed to resolve hard sediment sampling concerns in order to complete random stratified sampling.
- Sample locations in areas of known/encountered heavy sheen contamination are planned to be skipped and returned to with support from NRC Environmental Services to contain sheen during sampling.
- Sampling is taking more time than initially projected.

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):
A minor sheen was observed in sample collected at SMA targeted sample location PDI-SG-S222. The sample was returned to the sample site and the location was skipped and will be returned to with support from NRC Environmental Services.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):
On the Tieton, stratified random surface sediment samples were collected between RM 11.0 and 11.5 West, approximately, at the following locations:

- PDI-SG-B393-BL1 – Within 25 ft radius, clayey silt with trace organics
- PDI-SG-B390-BL1 – Within 25 ft radius, silt with trace sand

- PDI-SG-B387-BL1 – Within 25 ft radius, sandy silt
- PDI-SG-B383-BL1 – Within 25 ft radius, sandy silt with trace fines
- PDI-SG-B382-BL1 (Alternate 1) – Within 25 ft radius, silt with fine sand
- PDI-SG-B377-BL1 – Within 25 ft radius, silt with trace organics
- PDI-SG-B374-BL1 – Within 25 ft radius, sandy silt

On the Cayuse, SMA surface sediment samples were collected at following locations within Swan Island Lagoon:

- PDI-SG-S215-BL1 – Within 25 ft radius, silt with trace fine sand; trace sheen and midge
- PDI-SG-S223-BL1 – Within 25 ft radius, silt with silty sand; clam in one grab
- PDI-SG-S225-BL1 – Within 25 ft radius, silt with part clay and trace sand; scattered oxide tubes
- PDI-SG-S231-BL1 – Within 25 ft radius, silt with few clay and trace sand; scattered oxide tubes
- PDI-SG-S230-BL1 – Within 50 ft radius, silt with trace sand and few clay
- PDI-SG-S234-BL1 – Within 25 ft radius, silt with trace sand and few clay; scattered oxide tubes
- PDI-SG-S238-BL1 – Within 25 ft radius, silt with clay and trace sand; trace organics
- PDI-SG-S241-BL1 – Within 25 ft radius, silt with trace sand and few clay; scattered oxide tubes
- PDI-SG-S235-BL1 – Within 25 ft radius, silt with trace sand and few clay; scattered oxide tubes

Note: Sediment descriptions are simplified and AECOM/Geosyntec provided more detailed sediment descriptions in their sampling notes.

Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):
None

Wastes Generated and How Handled:

- Excess sediment and debris in the power grab sampler and in the sampling bowls was rinsed back into the river per the FSP. No heavy sheen was observed.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily as needed for disposal to a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:
None

Signature: Wardah Azhar, Kyle Vickstrom **DATE** May 1, 2018

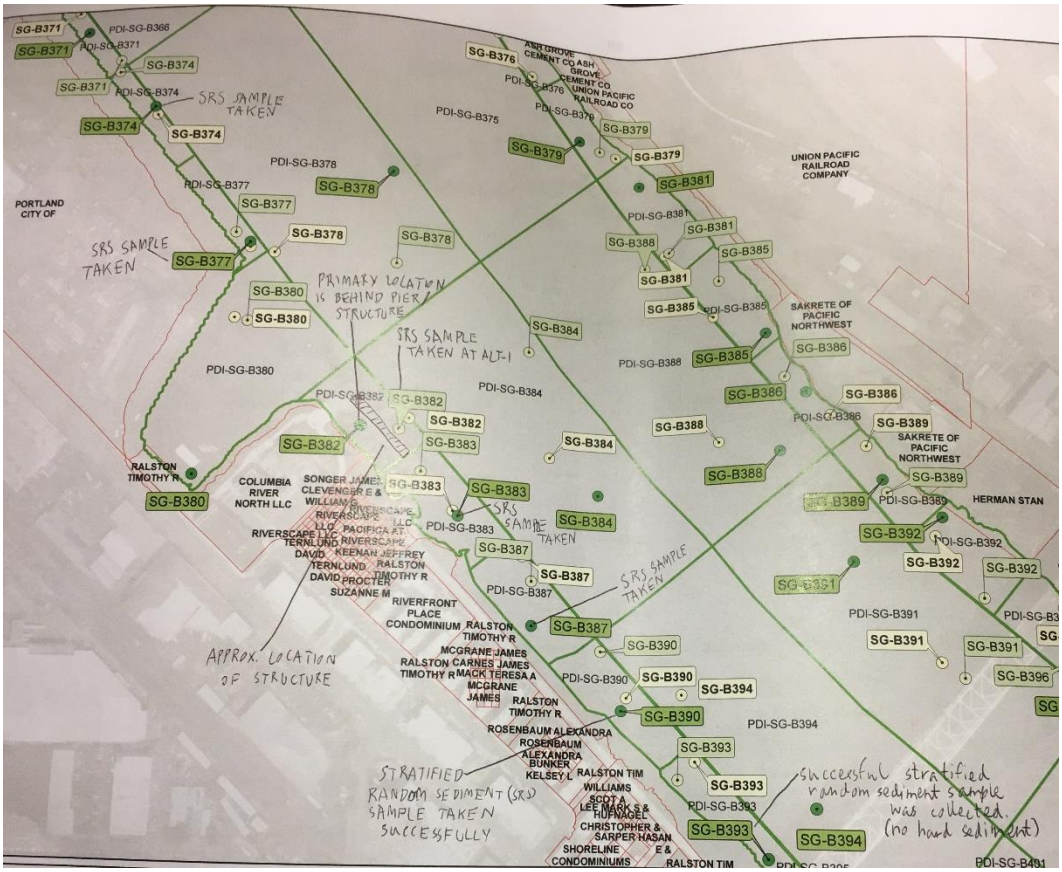

Figure 1: Random stratified sampling field location notes (Tieton)

Figure 2: SMA surface sediment samples collected within Swan Island Lagoon onboard the Cayuse.